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September 18, 2009

Clerk of the Board Air Resources Board 1001 I Street Sacramento, CA 95814

Subject: Notice of Public Hearing to Consider Proposed Amendments to New Passenger Motor Vehicle Greenhouse Gas Emission Standards, September 24-25, 2009

Ford Motor Company (Ford) appreciates the opportunity to comment on the California Air Resources Board (CARB) proposed amendments to the New Passenger Motor Vehicle Greenhouse Gas Emission Standards dated August 7, 2009. Ford supports CARB's intent to aggregate volumes from California and states adopting California standards into one fleet average as well as to allow the use of Federal CAFE data to demonstrate compliance with the greenhouse gas (GHG) standards.

In general Ford's comments address the following:

- 1) Properly identifying states that have adopted and can enforce the California Greenhouse Gas Requirements
- 2) Further regulatory language required to support the use of CAFE data

In addition, Ford is attaching an amended regulations document that contains our recommended changes highlighted in red. Ford welcomes the opportunity to discuss this information in detail with CARB staff. If you wish to discuss further, please contact Robert Holycross at (313) 845-8247 or Cynthia Williams at 313-322-6643.

Sincerely,

Attachment

Roll Holyan for

cc: Steve Albu Paul Huges

Ford Motor Company Comments on the California Air Resources Board Proposed Amendments to the New Passenger Motor Vehicle Greenhouse Gas Emission Standards

Ford Motor Company (Ford) welcomes the opportunity to comment on the California Air Resources Board (CARB) proposed amendments to the New Passenger Motor Vehicle Greenhouse Gas Emissions Standards. Ford supports CARB's plan to aggregate volumes from California and states adopting California standards into one fleet average as well as to allow the use of Federal CAFE data to demonstrate compliance with the greenhouse gas (GHG) standards.

In general Ford's comments address the following and are discussed in more detail in the body of the comments:

- Properly identifying states that have adopted and can enforce the California Greenhouse Gas Requirements
- 1) Further regulatory language required to support the use of CAFE data

Ford recommends the following changes to the Initial Statement of Reasons and amended regulations:

1) States Adopting and Enforcing California's Greenhouse Gas Standards

a. States Lacking Authority to Enforce GHG Standards

One of the elements of the agreement in principle entered into by California, the federal government, and the auto industry is that compliance with the 2009-2011 GHG standards will be determined based on the aggregate volume of vehicles in California and Section 177 states that are in a position to enforce such standards. The May 17, 2009 letter signed by Ford committing to the National Program indicated that compliance would be based on the aggregate fleet of vehicles sold in California "and the states that adopt *and enforce* California's GHG emission standards under section 177 of the CAA." As discussed in more detail below, the District of Columbia, Pennsylvania, and New Jersey do not have regulations authorizing them to enforce fleet average GHG standards for vehicles delivered for sale within their borders. Therefore, vehicles delivered for sale in these states should be not be included in the volumes used for purposes of determining compliance with Option 2.

- The District of Columbia has passed a statute authorizing the mayor to adopt California emissions standards beginning with the 2012 model year. However, to date no such regulations have been adopted. There is no regulation on the books requiring vehicles delivered for sale in the District of Columbia to meet any California emissions standards, let alone the GHG fleet average. Therefore, vehicles delivered for sale in the District of Columbia should not count in the aggregated fleet.
 - As an aside, even if the District of Columbia did have regulations in place adopting California's emissions standards, the program would not take effect until model year 2012, and therefore no D.C. vehicles would be counted in the aggregated volume until the 2012 model year.
- Pennsylvania's law "incorporates by reference" the California LEV program. Pennsylvania adopted specific language in 25 Pa. Code § 126.412 requiring manufacturers to demonstrate compliance with NMOG fleet average standards in Pennsylvania. However, there is no comparable language applicable with respect to fleet average GHG standards. Thus, when it comes to GHGs, Pennsylvania's "incorporation by reference" of the California regulations simply entitles Pennsylvania to receive vehicles certified under the California program. It does not require that any particular GHG fleet average be met in Pennsylvania. This was a conscious decision by Pennsylvania regulators. To the extent that Pennsylvania wanted to adopt GHG fleet average compliance requirements, it could have done so as it did for the NMOG program. Given the fact that vehicles sent to Pennsylvania under a "patchwork" approach would not have had to meet any particular GHG fleet average in Pennsylvania, it is not appropriate to include Pennsylvania vehicles under an aggregated approach. In any event, including Pennsylvania would be contrary to the agreement in principle, which specifically refers to a state's ability to *enforce* the standards. Since Pennsylvania does not have provisions in place enabling it to enforce such standards, its vehicles should not be included in the aggregated fleet.

- Like Pennsylvania, the state of New Jersey has not adopted regulations requiring vehicles delivered to that state to meet a GHG fleet average. New Jersey's regulations include a requirement that vehicles delivered for sale in New Jersey meet the fleet average NMOG requirement (see NJAC 7:27-29.5) and the ZEV mandate sales requirements (see NJAC 7:27-29.6). However, there are no comparable provisions requiring vehicles delivered for sale in New Jersey to meet the GHG fleet average requirement. Thus, while New Jersey is entitled to receive California-certified vehicles and enforce certain aspects of the California program in New Jersey, it is not in a position to enforce California's GHG emission standards. Since the right to enforce was specifically called out in the agreement in principle, it is clear that vehicles delivered for sale to New Jersey should not count in the aggregated volume.
- For the reasons stated above, Ford believes that the District of Columbia, Pennsylvania, and New Jersey should be removed from the list of section 177 states whose volumes will be aggregated to demonstrate compliance with California Greenhouse Gas Reporting requirements.¹

b. Option 2 Regulatory Language; Enforcement and Two-year Lead-time Requirement

Section 177 of the Clean Air Act provides allows a state to "adopt and enforce" California's vehicle emissions standards for a particular model year, if "California and such State adopt such standards at least two years before commencement of such model year." Thus, a state is not authorized under the Clean Air Act to "enforce" a California vehicle emissions standard unless it has promulgated regulations that meet the two-year lead-time requirement of Section 177. As discussed above, the National Program agreement in principle provides that only vehicles in states that can enforce the California GHG standards should be included in the aggregated total for purposes of determining compliance. Therefore, California's regulations should clarify: 1) that the vehicles counted under Option 2 must be from states that can enforce the California GHG standards, and 2) that one prerequisite for enforcement is that the two-year lead-time requirement of Section 177 is satisfied. We recommend that the language of Section 1961.1(a)(1)(A)1 be modified to read as follows:

Option 2: the total number of passenger cars, light-duty trucks, and medium-duty passenger vehicles that are certified to the California exhaust emission standards in this section 1961.1, and that are produced and delivered for sale in states that have adopted, with adequate lead time, provisions authorizing such states to enforce California's greenhouse gas emission standards for that model year, pursuant to Section 177 of the federal Clean Air Act (42 U.S.C. § 7507).

2) Regulatory Language Required to Support Use of CAFE Data

Production and Sales Information

In section 2.5.1.1.4 of the draft regulatory language, it states that a manufacturer that selects Option 2 must provide to the Executive Officer production, delivery, and sales values separately for the District of Columbia and for each individual state within the average. Because manufacturers do not track dealer sales or dealer trades, Ford recommends that this language be revised to say:

"... A manufacturer that selects Option 2 must provide to the Executive Officer final volumes of vehicles <u>produced and delivered for sale</u> separately <u>for each individual state</u> <u>within the average.</u>"

For your reference, Attachment I contains a copy of D.C. Code § 50-731, which authorizes the adoption of a low-emissions vehicle program by the District of Columbia. There are no District of Columbia regulations actually establishing such a program. Attachment II contains a copy of 25 Pa. Code §§ 126.411-126.413, which includes provisions for NMOG fleet averaging but no provisions for GHG fleet averaging. Attachment III contains a copy of the regulations establishing New Jersey's Low Emission Vehicle Program (NJAC §§ 7-27:29.1 et seq.), which include NMOG and ZEV requirements but no GHG fleet average requirements.

Basic Calculation

Ford agrees with CARB's revision in section 2.5.2.1 that allows manufacturers to demonstrate compliance with GHG requirements by substituting the term 1.9 CO2-equivalent grams per mile for the terms "296 x N2O + 23 x CH4 in the CO2-Equivalent Value Calculation. Ford believes that further clarification regarding the use of CAFE Program data is required in the section. Currently this section states that "Each manufacturer shall calculate both 'city' grams per mile average CO2-equivalent value for each GHG vehicle test group and a 'highway' grams per mile average CO2-equivalent for value for each GHG vehicle test group...."

To support manufacturers that choose to use CAFE Program data, Ford recommends that the regulatory language be amended to state:

"Each manufacturer shall calculate both 'city' grams per mile average CO2-equivalent value for each GHG vehicle test group and 'highway' grams per mile average CO2-equivalent for value for each GHG vehicle test group. Including AB 965 vehicles and vehicles certified in accordance with Section E.1.12 of these test procedures, using the formula below. For manufacturers electing to use CAFE Program data to demonstrate compliance, 1) Model Type Group data may be used in lieu of GHG test group data; and 2) metro-highway grams per mile average CO2-equivalent values may be used in lieu of 'city' and 'highway' grams per mile average CO2-equivalent. Greenhouse Gas emissions used for the...."

In order to support the use of metro-highway data, the following equivalence example is provided:

MPG			CO2		
CITY	HWY	M-H	CITY	HWY	M-H
20.0	26.0	22.3	444.4	341.8	398.2

Current method:

Proposed alternative method:

CO ₂ e(city) = 0.55*(8887/20)+296*N ₂ O + 23*CH ₄	CO ₂ e = 8887/22.32+296*N ₂ O + 23*CH ₄
$CO_2e(hwy) = 0.45*(8887/26)+296*N_2O + 23*CH_4$	
$CO_2e = 0.55*444.4 + 0.45*341.8+1.9$	CO ₂ e = 8887/22.32+1.9
CO ₂ e = 400.1 grams/mile	CO ₂ e = 400.1 grams/mile

For a model type group with a city fuel economy of 20.0 mpg and a highway fuel economy of 26.0 mpg, both methods will yield an identical CO2-equivalent value of 400.1 grams per mile.

Procedures for Offsetting Greenhouse Gas Debits

In Section 3.2.3.1., CARB modified the language for calculating the number of passenger cars and LDT1s not meeting the state board's emissions standards to reference California vehicles only, but did do the same for the number of LDT2s and MDPVs. Ford recommends that consistent language is used for all vehicles as follows:

"For the purposes of Health and Safety Code section 43211, the number of passenger cars and LDT1s not meeting the state board's emission standards shall be determined by dividing the total amount of g/mi Greenhouse Gas emission debits for the model year calculated for California by the g/mi Greenhouse Gas fleet average requirement for PCs and LDTs 0-3750 lbs. LVW applicable for the model year in which the debits were first incurred, and the number of LDT2s and MDPVs not meeting the state board's emission standards shall be determined by dividing the total amount of g/mi Greenhouse Gas emission debits for the model year calculated for California by the g/mi Greenhouse Gas fleet average requirement for LDTs 3751 lbs. LVW – 8500 lbs. GVW and MDPVs applicable for the model year in which the debits were first occurred."

Greenhouse Gas Testing Requirements

In Section 3.4, CARB states that a manufacturer that elects to use CAFE Program emissions data to demonstrate compliance with the greenhouse requirements must use <u>all</u> of the data that is used by the U.S. Environmental Protection Agency to determine a manufacturers corporate average fuel economy for the applicable model year, may

forego testing of the "worst-case" configuration. In some cases there may be Federal only model type groups, if such a case exists, then the California volume would be zero, thus this model type group would not contribute to the Greenhouse Gas fleet average. For this reason, Ford recommends that the language be revised as follows:

"A manufacturer that elects to use CAFE Program emissions data to demonstrate compliance with the greenhouse requirements <u>may use</u>, as appropriate, the data used by the U.S. Environmental Protection Agency..."

Greenhouse Gas Reporting Requirements

In Section 4.5 (v), Ford believes that manufacturers that have elected to demonstrate compliance under Option 2, should be given the option to use Model Type Groups. Ford recommends that the regulatory language be modified to state:

"for manufacturers demonstrating compliance under section E.2.5.1.1, Option 2, final combined and individual state sales volumes for each <u>Model Type</u> group for California, the, and all states that have adopted California's greenhouse gas standards for that model year pursuant to section 177 of the federal Clean Air Act (42 U.S.C. 7507)."

Conclusion

In summary, Ford believes that it is important that all stakeholders are aligned as we prepare to demonstrate compliance with the New Passenger Motor Vehicle Greenhouse Gas Emissions Standards. Ford believes that it is necessary that CARB identify the proper states that have adopted and have the ability to enforce California GHG standards. We also believe that it is imperative that additional language be added to the amended regulations to further clarify the use of Federal CAFE data. Ford offers the above recommendations which provide additional clarity to the CARB amended GHG regulations.

In addition, Ford is attaching an amended regulations document that contains our recommended changes highlighted in red. Ford welcomes the opportunity to discuss this information in detail with CARB staff.

DC ST § 50-731

§ 50-731. Establishment of the low-emissions vehicle program.

DC ST § 50-731

District of Columbia Official Code 2001 Edition <u>Currentness</u> Division VIII. General Laws.

Title 50. Motor and Non-Motor Vehicles and Traffic. (Refs & Annos)

Subtitle III. Environmental Protection.

Chapter 7A. Clean Car Standards.

→§ 50-731. Establishment of the low-emissions vehicle program.

The Mayor:

- (1) Shall establish and maintain a low-emissions vehicle program by adopting California emissions standards and compliance requirements applicable to vehicles of model year 2012, and each model year thereafter, pursuant to section 177 of the Clean Air Act, approved August 7, 1977 (91 Stat. 750; 42 U.S.C. § 7507);
- (2) May adopt, by rule, motor vehicle emissions inspection, recall, and warranty requirements;
- (3) May work in cooperation with, and enter into agreements with, other states to administer requirements of the program;
- (4) Shall work in conjunction with other states to promote and facilitate the regional adoption of similar low-emissions vehicle programs; and
- (5) Shall educate the residents of the District on the requirements of any adopted low-emissions vehicle program.

CREDIT(S)

(May 13, 2008, D.C. Law 17-151, § 2, 55 DCR 3450.)

HISTORICAL AND STATUTORY NOTES

Legislative History of Laws

Law 17-151 the "Clean Cars Act of 2008", was introduced in Council and assigned Bill No.17-99 which was referred to the Committee on Public Works and Environment. The Bill was adopted on first and second readings on February 5, 2008, and March 4, 2008, respectively. Signed by the Mayor on March 19, 2008, it was assigned Act No. 17-323 and transmitted to both Houses of Congress for its review. D.C. Law 17-151 became effective on May 13, 2008.

DC CODE § 50-731

Current through July 27, 2009

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Subchapter D. PENNSYLVANIA CLEAN VEHICLES PROGRAM LOW EMISSION VEHICLES

- § 126.411. General requirements.
- (a) The Pennsylvania Clean Vehicles Program requirements apply to all new passenger cars and light-duty trucks sold, leased, offered for sale or lease, imported, delivered, purchased, rented, acquired, received, titled or registered in this Commonwealth starting with the 2008 model year and each model year thereafter.
- (b) The provisions of the California Low Emission Vehicle Program, Title 13 CCR, Division 3, Chapters 1 and 2, are adopted and incorporated herein by reference, and apply except for the following:
 - (1) The zero emissions vehicle percentage requirement in Title 13 CCR, Division 3, Chapter 1, § 1962.
- (2) The emissions control system warranty statement in Title 13 CCR, Division 3, Chapter 1, § 2039.

Source

The provisions of this § 126.411 amended December 8, 2006, effective December 9, 2006, 36 Pa.B. 7424. Immediately preceding text appears at serial page (250845).

- § 126.412. Emission requirements.
- (a) Starting with the model year 2008, a person may not sell, import, deliver, purchase, lease, rent, acquire, receive, title or register a new light-duty vehicle, subject to the Pennsylvania Clean Vehicles Program requirements, in this Commonwealth that has not received a CARB Executive Order for all applicable requirements of Title 13 CCR, incorporated herein by reference.
- (b) Starting with the model year 2008, compliance with the NMOG fleetwide average in Title 13 CCR, Division 3, Chapter 1, § 1961 shall be demonstrated for each motor vehicle manufacturer based on the number of new light-duty vehicles delivered for sale in this Commonwealth.
- (c) Credits and debits for calculating the NMOG fleet average shall be based on the number of light-duty vehicles delivered for sale in this Commonwealth and may be accrued and utilized by each manufacturer according to procedures in Title 13 CCR, Division 3, Chapter 1.
- (d) NMOG fleet average credits generated during the 2008, 2009 and 2010 model years may be applied toward any of the model years 2008 through 2010 for the purpose of demonstrating compliance with subsections (b) and (c). The credits generated during this period may be applied at full value for any of the model years 2008 through 2010.
- (e) New motor vehicles subject to this subchapter must possess a valid emissions control label which meets the requirements of Title 13 CCR, Division 3. Chapter 1.

Source

The provisions of this § 126.412 amended December 8, 2006, effective December 9, 2006, 36 Pa.B. 7424. Immediately preceding text appears at serial page (250846).

- § 126.413. Exemptions.
- (a) The following new motor vehicles are exempt from the Pennsylvania Clean Vehicles Program requirements of this subchapter:
- (1) Emergency vehicles.
- (2) A light-duty vehicle transferred by a dealer to another dealer for ultimate sale outside of this Commonwealth.
- (3) A light-duty vehicle transferred for use exclusively off-highway.
- (4) A light-duty vehicle transferred for registration out-of-State.
- (5) A light-duty vehicle granted a National security or testing exemption under section 203(b)(1) of the Clean Air Act (42 U.S.C.A. § 7522(b)(1)).
- (6) A light-duty vehicle held for daily lease or rental to the general public which is registered and principally operated outside of this Commonwealth. For purposes of this paragraph, a light-duty vehicle is deemed to be principally operated outside of this Commonwealth if it is registered outside of this Commonwealth in accordance with the Inter-Jurisdictional Agreement on Apportioning Vehicle Registration Fees developed under the Intermodal Surface Transportation and Efficiency Act of 1991 (Pub. L. 102-240, 105 Stat. 1914), and known as the International Registration Plan, or a successor plan for apportioning vehicle registration fees internationally.
- (7) A light-duty vehicle engaged in interstate commerce which is registered and principally operated outside of this Commonwealth.
- (8) A light-duty vehicle acquired by a resident of this Commonwealth for the purpose of replacing a vehicle registered to the resident which was damaged, or became inoperative, beyond reasonable repair or was stolen while out of this Commonwealth if the replacement vehicle is acquired out of this Commonwealth at the time the previously owned vehicle was either damaged or became inoperative or was stolen.
- (9) A light-duty vehicle transferred by inheritance or court decree.
- (10) A light-duty vehicle defined as a military tactical vehicle or engines used in military tactical vehicles including a vehicle or engine excluded from regulation under 40 CFR 85.1703 (relating to application of section 216(2)).
 - (11) A light-duty vehicle titled or registered in this Commonwealth before December 9, 2006.
- (12) A light-duty vehicle having a certificate of conformity issued under the Clean Air Act and originally registered in another state by a resident of that state who subsequently establishes residence in this Commonwealth and upon registration of the vehicle provides satisfactory evidence to the Department of Transportation of the previous residence and registration.
- (13) A vehicle transferred for the purpose of salvage.
- (b) To title or register an exempted vehicle, the person seeking title or registration shall provide satisfactory evidence, as determined by the Department of Transportation, demonstrating that the exemption is applicable.

The provisions of this § 126.413 amended December 8, 2006, effective December 9, 2006, 36 Pa.B. 7424. Immediately preceding text appears at serial pages (250846) to (250847).

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NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION NEW JERSEY ADMINISTRATIVE CODE

TITLE 7 CHAPTER 27 SUBCHAPTER 29

LOW EMISSION VEHICLE (LEV) PROGRAM

REGULATORY HISTORY

Effective: January 17, 2006 Operative: January 27, 2006 See: 38 N.J.R. 497(b)

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SUBCHAPTER 29 LOW EMISSION VEHICLE PROGRAM

7:27-29.1 **Definitions**

The following words and terms, when used in this subchapter, shall have the following meanings unless the context clearly indicates otherwise.

"Advanced technology partial zero emission vehicle" or "ATPZEV" means a vehicle certified as an advanced technology partial zero emission vehicle pursuant to the CARB vehicle standards for the applicable model year and has received a CARB Executive Order, but shall not include a partial zero emission vehicle or a zero emission vehicle.

"Air contaminant emission control system" means the equipment designed for installation on a motor vehicle or motor vehicle engine for the purpose of reducing the air contaminants emitted from the motor vehicle or motor vehicle engine or a system or engine modifications on a motor vehicle which causes a reduction of air contaminants emitted from the motor vehicle engine, including but not limited to exhaust control systems, fuel evaporative control systems and crankcase ventilating systems.

"Business" means an occupation, profession or trade; a person or partnership or corporation engaged in commerce, manufacturing, or a service; a profit-seeking enterprise or concern.

"California-certified" means a vehicle having a valid Executive Order stating that the vehicle meets all applicable requirements under applicable sections of Title 13, CCR and approved for sale in California by the CARB.

"California Air Resources Board" or "CARB" means the agency or its successor established and empowered to regulate sources of air pollution in the state of California, including motor vehicles, pursuant to Section 39003, California Health & Safety Code, as amended or supplemented.

"California credit balance" means the balance of credits that a manufacturer has on deposit with the California ZEV Bank on January 2, 2008.

"California credit ratio" means the ratio of the average number of PCs and LDT-1s that a manufacturer produced and delivered for sale in New Jersey to the average number of PCs and LDT-1s the manufacturer produced and delivered for sale in California during the time period selected by the manufacturer for calculation of their ZEV sales requirement for model year 2009, as set forth in Title 13, CCR, Section 1962.

"California low emission vehicle program" means the low emission vehicle program being implemented in the state of California, pursuant to the provisions of the Clean Air Act and the California Code of Regulations.

"CCR" means the California Code of Regulations.

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"Certificate of conformity" means that document issued by California Air Resources Board, or the United States Environmental Protection Agency.

"Clean Air Act" or "CAA" means the Federal Clean Air Act, 42 U.S.C. §§ 7401 et seq., as amended and supplemented.

"Commissioner" means the Commissioner of the Department.

"Dealer" means any person actively engaged in the business of offering to sell, soliciting or advertising the sale, buying, transferring, leasing, selling or exchanging new motor vehicles and who has an established place of business.

"Delivered for sale means vehicles that have received a bill of lading for sale in New Jersey and are shipped, or are in the process of being shipped to a dealer in New Jersey.

"Department" means the New Jersey Department of Environmental Protection.

"Emergency vehicle" means any publicly owned vehicle operated by a peace officer in the performance of their duties, any authorized emergency vehicle used for fighting fires or responding to emergency fire calls and any publicly owned authorized emergency vehicle used by an emergency medical technician or –paramedic or any ambulance used by a private entity under contract with a public agency.

"Emission standards" means specified limitations on the discharge of air contaminants into the atmosphere.

"Engine family" means the basic classification unit comprised of the engine and drive train configuration selected by a manufacturer and used for the purpose of certification testing.

"Executive order" means a document issued by the CARB certifying that a specified test group or model year vehicle has met all applicable requirements adopted by the CARB pursuant to the applicable sections of Title 13, CCR for the control of specified air contaminants from motor vehicles and is thereby certified for sale in California.

"Gross vehicle weight rating" or "GVWR" means the value specified by the manufacturer as the maximum design loaded weight of a single vehicle.

"Intermediate volume manufacturer" means a manufacturer that has been designated by the CARB as an intermediate volume manufacturer as defined at Title 13, CCR, Section 1900.

"Large volume manufacturer" means a manufacturer that has been designated by the CARB as a large volume manufacturer as defined at Title 13, CCR, Section 1900.

"Light-duty truck" means any 2000 and subsequent model year motor vehicle certified to the standards in Title 13, CCR, Section 1961(a)(1), rated at 8,500 pounds gross vehicle weight or

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less, and any other motor vehicle rated at 6,000 pounds gross vehicle weight or less, which is designed primarily for purposes of transportation of property or is a derivative of such a vehicle, or is available with special features enabling off-street or off-highway operation and use.

"LDT-1" or "Light-duty truck-1" means a light-duty truck with a loaded vehicle weight of 3,750 pounds or less.

"LDT-2" or "Light-duty truck-2" means a light-duty truck with a loaded vehicle weight of greater than 3,750 pounds and a gross vehicle weight of less than or equal to 8,500 pounds and includes medium-duty passenger vehicles when determining compliance with the greenhouse gas emission standards of this subchapter.

"Loaded vehicle weight" means the vehicle curb weight plus 300 pounds.

"Mail out" means a widely distributed general correspondence issued by the CARB whenever said board needs information from the public, or when it wishes to inform the public of new information. "Manufacturer" means any small, intermediate, or large volume vehicle manufacturer as defined at Title 13, CCR, Section 1900.

"Medium-duty passenger vehicle" means medium-duty passenger vehicle as defined at Title 13, CCR, Section 1900.

"Model year" means model year as defined at 40 CFR 85.2302 and determined in accordance with the provisions of 40 CFR 85.2301 through 85.2304, as supplemented or amended, and incorporated herein by reference.

"Motor vehicle" or "vehicle" means every device in, upon, or by which a person or property is or may be transported otherwise than by muscular power, excepting such devices as run only upon rails or tracks and motorized bicycles.

"Motor vehicle engine" means an engine that is used to propel a motor vehicle.

"New motor vehicle engine" means a new engine in a motor vehicle.

"New vehicle" means any vehicle with 7,500 miles or fewer on its odometer.

"Non-methane organic gas" or "NMOG" means the total mass of oxygenated and non-oxygenated hydrocarbon emissions.

"Partial zero emission vehicle" or "PZEV" means a vehicle certified as a partial zero emission vehicle pursuant to the CARB vehicle standards for the applicable model year and has received a CARB Executive Order, but shall not include an advanced technology partial zero emission vehicle or a zero emission vehicle.

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- "Passenger car" means any motor vehicle designed primarily for transportation of individuals and having a design capacity of 12 individuals or fewer.
- "Person" means an individual, public or private corporation, company, partnership, firm, association, society or joint stock company, municipality, state, interstate body, the United States, or any Board, commission, employee, agent, officer or political subdivision of a state, an interstate body or the United States.
- "Placed in service" means having been sold to an ultimate purchaser and not to a dealer or other distribution chain entity, and having been individually registered for on-road use by the New Jersey Motor Vehicle Commission.
- "Sale" or "sell" means the transfer of equitable or legal title to a motor vehicle or motor vehicle engine to the ultimate purchaser.
- "State" means the State of New Jersey, unless otherwise specified.
- "Test group" means a grouping of vehicles as defined by 40 CFR 86.1827-01, as supplemented or amended, and incorporated herein by reference.
- "Test vehicle" means an experimental or prototype motor vehicle that appears to have very low emission characteristics, or a used motor vehicle within which an experimental motor vehicle pollution control device is installed, and which has also received a test vehicle or fleet permit from the CARB.
- "Ultimate purchaser" means, with respect to any new motor vehicle or new motor vehicle engine, the first person whom in good faith purchases a new motor vehicle or new motor vehicle engine for purposes other than resale.
- "USEPA" means the United States Environmental Protection Agency.
- "Vehicle equivalent credit" or "credit" means ZEV credit and represents one ZEV, PZEV or ATPZEV that a manufacturer delivers for sale in New Jersey, multiplied by the applicable credit multiplier as established in N.J.A.C. 7:27-29.7.
- "Vehicle identification number" or "VIN" means a unique, 17 digit, alphanumeric code that the vehicle manufacturer assigns to a vehicle.
- "Zero emission vehicle" or "ZEV" means a vehicle certified as a zero emission vehicle pursuant to the CARB zero emission vehicle standards for the applicable model year, but shall not include an advanced technology partial zero emission vehicle or a partial zero emission vehicle.
- "ZEV Credit Bank" means the system designated by the Department, that records and tracks the generation, verification, transfer, voluntary retirement, use, and invalidation of vehicle equivalent credits.

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7:27-29.2 Purpose

- (a) This subchapter establishes in the State a LEV program, which incorporates the requirements of the California LEV program.
- (b) The LEV program shall apply to all model year 2009 and subsequent motor vehicles that are passenger cars and light-duty trucks subject to the California LEV program and delivered for sale in New Jersey on or after January 1, 2009.
- (c) This subchapter establishes the ZEV Credit Bank, through which manufacturers of passenger cars and light-duty trucks may earn, bank, and acquire from other manufacturers credits for certain qualifying vehicles. Vehicle manufacturers may use the credits to offset the ZEV sales requirements of the LEV program.

7:27-29.3 Applicability - LEV program

- (a) Except as set forth in (b) and (c) below, no dealer or other person within this State shall deliver for sale, offer for sale, sell, import, deliver, purchase, rent, acquire, receive, or register on or after January 1, 2009 a new 2009 or subsequent model-year passenger car or light-duty truck unless the vehicle has been certified by the CARB and has received a CARB Executive Order.
- (b) Prior to January 1, 2010, model year 2009 vehicles that do not meet the requirements of (a) above, but were produced and delivered for sale in New Jersey on or before January 1, 2009, and have a certificate of conformity issued pursuant to the Clean Air Act, may be sold, offered for sale, purchased, acquired or received in New Jersey.
- (c) The prohibitions contained in (a) above shall not apply to passenger cars and light-duty trucks that are:
 - 1. Held for daily lease or rental to the general public or engaged in interstate commerce, which are registered and principally operated outside of New Jersey;
 - 2. Test vehicles and emergency vehicles;
 - 3. Acquired by a resident of this State for the purposes of replacing a vehicle registered to such resident, which vehicle was damaged, or became inoperative beyond reasonable repair, or was stolen while out of this State; provided that such replacement vehicle is acquired out of State at the time the previously registered vehicle was either damaged or became inoperative beyond reasonable repair or was stolen;
 - 4. Transferred by inheritance;
 - 5. Transferred by court decree;
 - 6. Have a certificate of conformity issued pursuant to the Clean Air Act and originally registered in another state by a resident of that state who subsequently establishes residence in this State;
 - 7. Sold directly from one dealer to another dealer;
 - 8. Sold for the purpose of being wrecked or dismantled;
 - 9. Sold exclusively for off-highway use; or
 - 10. Sold for registration out of State.

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(d) For the purposes of this subchapter, it is presumed that the equitable or legal title to any motor vehicle with an odometer reading of 7,500 miles or more has been transferred to an ultimate purchaser and that the equitable or legal title to any motor vehicle with an odometer reading of fewer than 7,500 miles has not been transferred to an ultimate purchaser.

7:27-29.4 Emission certification standards

Each model year 2009 and subsequent motor vehicle subject to N.J.A.C. 7:27-29.3(a) shall be California-certified.

7:27-29.5 NMOG fleet-wide average exhaust emission requirement

- (a) A manufacturer of model year 2009 or later passenger cars or light-duty trucks delivered for sale in New Jersey on or after January 1, 2009, shall demonstrate compliance with the NMOG fleet-wide average exhaust emission requirement of Title 13, CCR, Section 1961, which average shall be based on the number of the manufacturer's vehicles subject to N.J.A.C. 7:27-29.3(a).
- (b) A manufacturer may accrue NMOG credits and debits and use them in accordance with Title 13, CCR, Section 1961(c), except that the formula for accruing credits at Title 13, CCR, Section 1961(c) shall be based upon the number of vehicles the manufacturer produces and delivers for sale in New Jersey in accordance with N.J.A.C. 7:29.3(a).

7:27-29.6 ZEV Sales Requirement

- (a) Beginning on January 1, 2009, for vehicles manufactured in model year 2009 and each subsequent model year, each manufacturer shall comply with the ZEV sales requirement at Title 13, CCR, Section 1962, including early credit and banking provisions.
- (b) An intermediate volume or large volume manufacturer of ZEVs, ATPZEVs and PZEVs may use vehicle equivalent credits in accordance with Title 13, CCR, Section 1962, to offset the ZEV Sales Requirement of (a) above.

7:27-29.7 ZEV Credit Bank

- (a) Beginning in model year 2009, each intermediate volume and large volume manufacturer of ZEVs, ATPZEVs and PZEVs shall open an account in the ZEV credit bank. Except as set for in (h) below, the account must be opened no later than January 1, 2009.
- (b) In order to open an account with the ZEV Credit Bank, the manufacturer shall submit to the Department an account application form containing the following information:
 - 1. For the account holder:
 - i. Name;
 - ii.Mailing address;
 - iii. Telephone number;

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- iv. Type of business (if applicable);
 - v. Authorized representative's name, title, phone number, fax number and email address; and
 - vi. Authorized representative's signature.
- (c) Upon receipt of a complete account application, the Department shall issue a unique identifier for the account and notify the account applicant of the identifier.
- (d) In order to deposit credits into the ZEV Credit Bank, a manufacturer shall submit a Notice of Credit Generation to the Department on a form that the Department provides. The Notice of Credit Generation shall include the following:
 - 1. For ZEVs delivered for sale in the State:
 - i. Manufacturer's ZEV Credit Bank account identifier;
 - ii. Model year of vehicle qualifying for credit;
 - iii. CARB Executive Order number;
 - iv. ZEV Tier type (NEV, 0, I, II, III for California, III for Section 177 states);
 - v. Vehicle identification number; and
 - vi. Date the vehicle was delivered for sale in New Jersey.
 - 2. For ZEVs placed in service in the State, all information listed under (d)1, above, and also the following:
 - i. Date the vehicle was placed in service
 - ii. Whether the vehicle was placed in service with an option to purchase or lease the vehicle;
 - 3. For ATPZEVs and PZEVs delivered for sale in the State:
 - i. The vehicle certification class (ATPZEV or PZEV);
 - ii. The manufacturer's ZEV Credit Bank account identification;
 - iii. The model year of the vehicle(s);
 - iv. The date the vehicle was delivered for sale in New Jersey;
 - v. For ATPZEVs, the Federal test group;
 - vi. The CARB executive order number; and
 - vii. The number of vehicles delivered
- (e) The number of the credits generated and deposited for each qualifying vehicle shall be the number of qualifying vehicles times the applicable multiplier forth in Title 13 of the California Code of Regulations section 1962, except the multiplier applied to vehicles produced and delivered for sale in New Jersey from January 1, 1999 to January 13, 2004 shall be the highest applicable multiplier used by the CARB for the period January 1, 1999 to January 13, 2004.
- (f) A vehicle equivalent credit does not constitute or convey a property right.
- (g) Except as provided in (h), below, annually each manufacturer shall submit to the Department Notices of Generation or notice of a transfer to another manufacturer. Credits generated that are not reported to the Department on or before September 1 following the close of the model year in which the qualifying vehicle was produced and delivered for sale in the State shall not be deposited into the manufacturer's account, and cannot be used to offset ZEV Sales Requirements.

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- (h) In order to generate and deposit credits for vehicles delivered for sale in the State during the 1999 through 2005 model years, a manufacturer shall open an account with the ZEV Credit Bank and submit an appropriate Notice of Credit Generation to the Department on or before September 1, 2006.
- (i) A manufacturer with an account in the ZEV Credit Bank may acquire credits from another manufacturer with an account in the ZEV Credit Bank; however, if the credits are to be used for future compliance with the ZEV sales requirement at N.J.A.C. 7:27-29.6, the transaction must be recorded in the ZEV Credit Bank and certified by both parties to the transaction.
- (j) For each acquisition of credits from another manufacturer, the manufacturer from whom the credits are acquired shall supply the following information to the Department, on a form that the Department shall supply:
 - 1. Date of acquisition;
 - 2. Model year the credits were generated;
 - 3. Type of vehicle (NEV, ZEV type, ATPZEV or PZEV); and
 - 4. Number of credits in grams/mile NMOG.
- (k) The Department will verify all credits and, if discrepancies are found, will notify the manufacturer and adjust the account. The Department may audit an account at any time.
- (l) A manufacturer may deposit into its account in the ZEV Credit Bank a number of credits equal to its California credit balance as of January 2, 2008, multiplied by the California credit ratio. The deposit may be made only after all credit obligations for model years 2008 and earlier have been satisfied in California.
- (m) A manufacturer electing to deposit credits under (l), above, shall offer for sale in New Jersey in model years 2009 through 2011 any PZEV, AT-ZEV or ZEV, except Type III ZEVs, that it offers for sale in California during the same period.

7:27-29.8 Fees

- (a) Each intermediate volume and large volume vehicle manufacturer shall pay to the Department an annual fee of \$0.25 per vehicle for each passenger car and light-duty truck, including both Federal Tier 2 certified and California-certified vehicles, delivered for sale in New Jersey on or after January 1, 2005, and which vehicles the manufacturer has been required to report under Section D.6(a), "California Assembly-Line Test Procedures for 1983 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles," as set forth at Title 13, CCR, Section 2062.
- (b) For vehicles delivered for sale in calendar year 2005 and thereafter, each intermediate volume and large volume manufacturer shall report its New Jersey production numbers to the Department by March 1 of the succeeding calendar year.

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- (c) The Department shall notify each manufacturer of the total fee due. The manufacturer shall remit the fee to the Department within 30 days after receipt of the Department's notice. Payment shall be made payable to the Treasurer, State of New Jersey.
- (d) An intermediate volume or large volume manufacturer failing to pay the fee shall not be permitted to open an account in the ZEV Credit Bank, or earn, deposit, use or acquire vehicle equivalent credits until such time as its fee and any unpaid balance are paid.

7:27-29.9 Vehicle Testing

- (a) Each new vehicle model subject to N.J.A.C. 7:27-29.3(a) shall satisfy the motor vehicle emission requirements of Title 13, CCR, Sections 1960.1, 1960.5, 1961, 1962, 1962.1, 1965, 1968.1, 1968.2, 1968.5, 1976, 1978, 2037, 2038, 2062, 2101, 2111, and 2235.
 - 1. A manufacturer shall demonstrate compliance by presenting to the Department upon request copies of the applicable Executive Order.
- (b) Each manufacturer of a vehicle subject to N.J.A.C. 7:27-29.3(a) shall conduct Inspection Testing and Quality Audit Testing in accordance with Title 13, CCR, Section 2062, and shall provide the test results to the Department upon request.
 - 1. A manufacturer shall demonstrate compliance by presenting to the Department upon request copies of the test results for testing conducted pursuant to N.J.A.C. 7:27-29.3(b) and the determination and findings made by the CARB.
- (c) Each new vehicle subject to N.J.A.C. 7:27-29.3(a), prior to being offered for sale in New Jersey, shall meet the motor vehicle emission requirements of Title 13, CCR, Section 1961, as determined by compliance testing, conducted by CARB in accordance with Title 13, CCR, Sections 2101 through 2110, 2150, and 2151.
 - 1. A manufacturer shall demonstrate compliance by presenting to the Department upon request copies of the test results for testing conducted pursuant to N.J.A.C. 7:27-29.3(c) and the determination and findings made by the CARB.
- (d) For the purposes of detection and repair of vehicles subject to this subchapter failing to meet the motor vehicle emission requirements of Title 13, CCR, Section 1961the Department may conduct, after consultation with the CARB, In-Use Vehicle Enforcement Testing in accordance with the protocol and testing procedures in Title 13, CCR, Section 2140.
 - 1. A manufacturer shall demonstrate compliance by presenting to the Department upon request copies of the test results for testing conducted pursuant to
 - N.J.A.C. 7:27-29.3(d) and the determination and findings made by the CARB.

7:27-29.10 Warranty

(a) Each manufacturer of a vehicle subject to N.J.A.C. 7:27-29.3(a) shall warrant to the ultimate purchaser and each subsequent purchaser that the vehicle shall comply over its period of

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warranty coverage with all requirements of Title 13, CCR, Sections 2035 through 2038, 2040, and 2041.

- (b) Each manufacturer of a vehicle subject to N.J.A.C. 7:27-29.3(a) shall submit to the Department upon request a Failure of Emission-Related Components report as defined at Title 13, CCR, Section 2144.
- (c) For purposes of compliance with (b) above, a manufacturer may submit copies of the Failure of Emission-Related Components report that are submitted to the CARB.

7:27-29.11 Reporting Requirements

- (a) In addition to the reporting requirements in N.J.A.C. 7:27-29.7 (ZEV Credit Bank) and 7:27-29.8 (Fees), beginning with the 2009 model year each manufacturer of a vehicle subject to N.J.A.C. 7:27-29.3(a) shall submit annually to the Department, no later than March 1 following the close of the model year, a report documenting total deliveries for sale in New Jersey of vehicles in each test group during that model year.
 - 1. For the 2009 model year, the report shall separately show deliveries for sale prior to January 1, 2009 and on and after January 1, 2009.
- (b) Beginning with the 2009 model year, each manufacturer of a vehicle subject to N.J.A.C. 7:27-29.3(a) shall submit annually to the Department, by no later than March 1 following the close of the model year, a report, prepared according to Title 13, CCR, Section 1961, calculating the NMOG fleet-wide average exhaust emission for the model year just ended for vehicles delivered for sale in New Jersey.
 - 1. For the 2009 model year, the report shall separately show deliveries for sale prior to January 1, 2009 and on and after January 1, 2009.

7:27-29.12 Enforcement

(a) The Department or its representative shall have the right to enter and inspect any site, building, equipment, or vehicle, or any portion thereof, at any time, in order to ascertain compliance or non-compliance with the Air Pollution Control Act, N.J.S.A. 26:2C-1 et seq., this subchapter, any exemption, or any order, consent order, agreement, or remedial action plan issued, approved or entered into pursuant thereto. Such right shall include, but not be limited to, the right to test or sample any material, motor vehicle or motor vehicle engine or any emissions therefrom, at the facility; to sketch or photograph any portion of the site, building, vehicles or motor vehicle engines; to copy or photograph any document or record necessary to determine such compliance or non-compliance; and to interview any employees or representatives of the owner, operator or registrant. Such right shall be absolute and shall not be conditioned upon any action by the Department, except the presentation or appropriate credentials as requested and compliance with appropriate standard safety procedures.

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- (b) Records to support any application, notice, report or amendment submitted to the Department under this subchapter shall be maintained for a period of no less than five years after submitting the information to the Department, and shall be made readily available to the Department upon request.
- (c) Failure to comply with any of the obligations or requirements of this subchapter shall subject the violator to an enforcement action pursuant to the provisions of N.J.S.A. 26:2C-19 and N.J.A.C 7:27A-3.
- (d) Any order or enforcement action taken by the CARB to correct noncompliance with any section of Title 13, CCR, which action results in the recall of any vehicle pursuant to Title 13, CCR, sections 2109 through 2135, shall be applicable in New Jersey, except where the manufacturer demonstrates to the Department's satisfaction within 30 days of issuance of the CARB action that the action is not applicable to vehicles subject to N.J.A.C. 7:27-29.3(a).
- (e) Any emission-related recall campaign, voluntary or otherwise, initiated by any manufacturer pursuant to Title 13, CCR, Sections 2113 through 2121, shall extend to all similar vehicles subject to N.J.A.C. 7:27-29.3(a), except where the manufacturer demonstrates to the Department's satisfaction within 30 days of the CARB approval of the campaign that the campaign is not applicable to vehicles subject to N.J.A.C. 7:27-29.3(a).

7:27-29.13 Incorporation by reference

- (a) Unless specifically excluded by this subchapter, when a provision of the CCR is incorporated by reference, all notes, comments, appendices, diagrams, tables, forms, figures, and publications are also incorporated by reference.
- (b) Prospective incorporation by reference means the ongoing process, beginning January 27, 2006, whereby all provisions of regulations incorporated into this subchapter from the CCR, as set forth in Table 1, below, are continually automatically updated in order to maintain consistency with the most current CCR. Thus, any supplements, amendments, and any other changes including, without limitation, repeals or stays that affect the meaning or operational status of a California rule, brought about by either judicial or administrative action and adopted or otherwise noticed by the state of California, shall be paralleled by a similar change to the New Jersey rule so that the New Jersey rule will have the same meaning and status as its California counterpart. Similarly, to maintain consistency, all applicable new California regulations are also adopted into this subchapter by this automatic process.
- (c) Provisions of the CCR that are excluded from incorporation by reference in these rules are excluded in their entirety, unless otherwise specified. If there is a cross-reference to a California citation that was not specifically incorporated, the cross-referenced citation is not incorporated by virtue of the cross-reference. Provisions that have been excluded from incorporation by reference are also excluded from the process of prospective incorporation by reference.

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- (d) In the event that there are inconsistencies or duplications in the requirements of the provisions incorporated by reference from the CCR and the rules set forth in this subchapter, the provisions incorporated by reference from the CCR shall prevail.
- (e) Nothing in these provisions incorporated by reference from the CCR shall affect the Department's authority to enforce statutes, rules, permits or orders administered or issued by the Commissioner.
- (f) On or after January 27, 2006, new California rules, amendments, supplements, and other changes, brought about through administrative or judicial action, automatically incorporated through the prospective incorporation by reference process, shall be effective upon publication in the California Regulatory Notice Register and operative on the operative date cited by California in the relevant California Regulatory Notice Register notice, unless the Department publishes a notice of proposal repealing the adoption in New Jersey of the California regulation in whole or in part, and/or proposing to otherwise amend the affected State rules.
- (g) The following documents and sources are incorporated by reference within this subchapter

Table 1

California Code of Regulations (CCR)

Title 13

Provisions Incorporated by Reference

Title 13, CCR Title

Chapter 1
Motor Vehicle Pollution Control Devices
Article 1
General Provisions

Section 1900 Definitions

Article 2

Approval of Motor Vehicle Pollution Control Devices (New Vehicles)

Section 1956.8(g) and (h) Exhaust Emission Standards and Test Procedures – 1985 and Subsequent Model Heavy

Duty Engines and Vehicles

Section 1960.1 Exhaust Emission Standards and Test Procedures – 1981 and through 2006 Model

Passenger Cars, Light-Duty and Medium-Duty Vehicles

Section 1961 Exhaust Emission Standards and Test Procedures – 2004 and Subsequent Model

Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

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Section 1961.1	Greenhouse Gas Exhaust Emission Standards and Test Procedures -2009 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.
Section 1962	Zero Emission Vehicle Standards for 2005 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles
Section 1965	Emission Control and Smog Index Labels – 1979 and Subsequent Model Year Vehicles
Section 1968.1	Malfunction and Diagnostic System Requirements – 1994 and Subsequent Model Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles
Section 1968.2	$\label{lem:malfunction} \begin{tabular}{ll} Malfunction and Diagnostic System Requirements-2004 and Subsequent Model Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles \\ \end{tabular}$
Section 1968.5	Enforcement of Malfunction and Diagnostic System Requirements for 2004 and Subsequent Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines
Section 1976	Standards and Test Procedures for Motor Vehicle Fuel Evaporative Emissions
Section 1978	Standards and Test Procedures for Vehicle Refueling Emissions Article 6 Emission Control System Warranty
Section 2035	Purpose, Applicability and Definitions
Section 2036	Defects Warranty Requirements for 1979 through 1989 Model Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles; 1979 and Subsequent Model Year Motorcycles and Heavy-Duty Vehicles; and Motor Vehicle Engines Used in Such Vehicles.
Section 2037	Defects Warranty Requirements for 1990 and Subsequent

	Model Year Passenger Cars, Light-Duty Trucks and Medium- Duty Vehicles and Motor Vehicle Engines Used in Such Vehicles
Section 2038	Performance Warranty Requirements for 1990 and Subsequent Model Year Passenger Cars, Light-Duty Trucks and Medium- Duty Vehicles and Motor Vehicle Engines Used in Such Vehicles
Section 2039	Emission Control System Warranty Statement.
Section 2040	Vehicle Owner Obligations
Section 2041	Mediation; Finding of Warrantable Condition
Section 2046	Defective Catalyst

Chapter 2 Enforcement of Vehicle Emission Standards and Enforcement Testing.

Article 1

Assembly Line Testing.

Section 2062 Assembly-line Test Procedures 1998 and Subsequent Model-years

Article 2

Enforcement of New and In-use Vehicle Standards

Section 2101	Compliance Testing and Inspection - New Vehicle Selection, Evaluation and Enforcement Action.

Section 2109 New Vehicle Recall Provisions.

Section 2110 Remedial Action for Assembly-Line Quality Audit Testing of
Less than a Full Calendar Quarter of Production Prior to the
2001 Model-Year.

Article 2.1

Procedures for In-Use Vehicle Voluntary and Influenced Recalls.

Section 2111 Applicability.

Section 2112 Definitions.

Appendix A to Article 2.1.

This is a courtesy copy of this rule. All of the Department's rules are compiled in Title 7 of the New Jersey Administrative Code Section 2113 Initiation and Approval of Voluntary and Influenced Recalls. Section 2114 Voluntary and Influenced Recall Plans. Section 2115 Eligibility for Repair. Section 2116 Repair Label. Section 2117 Proof of Correction Certificate. Section 2118 Notification. Section 2119 Record keeping and Reporting Requirements. Section 2120 Other Requirements Not Waived. Section 2121 Penalties Article 2.2 Procedures for In-Use Vehicle Ordered Recalls. Section 2122 General Provisions. Section 2123 Initiation and Notification of Ordered Emission-Related Recalls. Section 2124 Availability of Public Hearing. Section 2125 Ordered Recall Plan. Section 2126 Approval and Implementation of Recall Plan. Section 2127 Notification of Owners. Section 2128 Repair Label. Section 2129 Proof of Correction Certificate. Section 2130 Capture Rates and Alternative Measures. Section 2131 Preliminary Tests. Section 2132 Communication with Repair Personnel. Section 2133 Record keeping and Reporting Requirements.

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Section 2135 Extension of Time

Article 2.3

In-Use Vehicle Enforcement Test Procedures.

Section 2136 General Provisions.

Section 2137 Vehicle Selection.

Section 2138 Restorative Maintenance.

Section 2139 Testing.

Section 2140 Notification of In-Use Results.

Article 2.4

Procedures for Reporting Failure of Emission-Related Components.

Section 2141 General Provisions

Section 2142 Alternative Procedures

Section 2143 Failure Levels Triggering Recall

Section 2144 Emission Warranty Information Report

Section 2145 Field Information Report

Section 2146 Emissions Information Report

Section 2147 Demonstration of Compliance with Emission Standards

Section 2148 Evaluation of Need for Recall

Section 2149 Notification of Subsequent Action

Chapter 3

Surveillance Testing

Section 2150 Assembly-Line Surveillance

Section 2151 New Motor Vehicle Dealer Surveillance

Chapter 4.4

Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks

Section 2235 Requirements.

(h) Any of the documents in (e) above may be obtained by contacting: Department of Environmental Protection

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Division of Air Quality
Bureau of Motor Vehicle Inspection and Maintenance
P.O. Box_437
Trenton, New Jersey 08625-0411
Attention: LEV Program

They may also be obtained by contacting:

State of California Office of Administrative Law 300 Capitol Mall, Suite 1250 Sacramento, California 95814-4339

or at the California Office of Administrative Law website at http://www.oal.ca.gov/

7:27-29.14 Severability

(a) Each section of this subchapter is severable. In the event that any section, subsection or division is held invalid in a court of law, the remainder of this subchapter shall continue in full force and effect.

Appendix B

CALIFORNIA EXHAUST EMISSION STANDARDS AND TEST PROCEDURES FOR 2001 AND SUBSEQUENT MODEL PASSENGER CARS, LIGHT-DUTY TRUCKS, AND MEDIUM-DUTY VEHICLES

Date of Release: August 7, 2009; 45-Day Notice version

California Environmental Protection Agency AIR RESOURCES BOARD

CALIFORNIA EXHAUST EMISSION STANDARDS AND TEST PROCEDURES FOR 2001 AND SUBSEQUENT MODEL PASSENGER CARS, LIGHT-DUTY TRUCKS, AND MEDIUM-DUTY VEHICLES

Adopted: August 5, 1999 Amended: December 27, 2000 Amended: July 30, 2002

Amended: September 5, 2003 (corrected February 20, 2004)

Amended: May 28, 2004 Amended: August 4, 2005 Amended: June 22, 2006 Amended: October 17, 2007 Amended: May 2, 2008

Amended: [Insert date of amendment]

Amended: [Insert date of amendment]

Note: The proposed amendments to this document are shown in <u>underline</u> to indicate additions and <u>strikeout</u> to indicate deletions compared to the test procedures as last amended May 2, 2008. The document in which the amendments are being shown is a version that was initially approved by the Board on May 28, 2009 for adoption as part of the "Rulemaking to Consider Plug-in Hybrid Electric Vehicle Test Procedure Amendments and Aftermarket Parts Certification Requirements Adoption." That rulemaking is not yet final. Changes to this document as approved on May 28, 2009 are indicated by <u>dotted underline</u> to indicate additions and *italies double strikeout* to indicate deletions compared to the May 2, 2008 version. The dotted underline and *italies double strikeout* text is presented for context and completeness only and is not subject to comment in this proposal.

Existing intervening text that is not amended is indicated by "* * * *".

Date of Release: August 7, 2009; 45-Day Notice version

CALIFORNIA EXHAUST EMISSION STANDARDS AND TEST PROCEDURES FOR 2001 AND SUBSEQUENT MODEL PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-**DUTY VEHICLES**

The provisions of Subparts B, C, and S, Part 86, Title 40, Code of Federal Regulations, as adopted or amended on May 4, 1999 or as last amended on such other date set forth next to the 40 CFR Part 86 section title listed below, and to the extent they pertain to exhaust emission standards and test procedures, are hereby adopted as the "California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles," with the following exceptions and additions.

GENERAL PROVISIONS FOR CERTIFICATION AND IN-USE PART I: VERIFICATION OF EMISSIONS

A. General Applicability

- B. Definitions, Acronyms and Abbreviations
 - 1. §86.1803 Definitions.
- 1.1 §86.1803-01. January 18, 2001 February 26, 2007. [No change, except as otherwise noted below.]

* * * *

2. California Definitions.

"Optional GHG Test Vehicle Configuration" means any GHG vehicle configuration that is selected for testing by the manufacturer as allowed by section G.2.34, other than the "worst-case" configuration.

* * * *

- 3. §86.1804 Acronyms and Abbreviations.
- 3.1 §86.1804.01 October 6, 2000 January 17, 2006. [No change.]

* * * *

Date of Release: August 7, 2009; 45-Day Notice version

Hearing Date: September 24-25, 2009

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C. General Requirements for Certification

1. §86.1805 Useful Life.

* * * *

- 1.2 §86.1805-04. October 6, 2000 February 26, 2007. Amend as follows:
 - 1.2.1 Subparagraph (a). [No change.]
- 1.2.2 Amend subparagraph (b) as follows: The full useful life of LEV, ULEV and SULEV passenger cars, light-duty trucks and medium-duty vehicles certified to the optional LEV II 150,000 mile standards in section E.1.1.2 shall be 15 years or 150,000 miles, whichever occurs first.
 - 1.2.3 Subparagraph (c) [No change.]
 - 1.2.4 Subparagraph (d) [No change.]
 - 1.2.5 Subparagraph (e) [n/a]
 - 1.2.6 Subparagraph (f) [n/a]
 - 1.2.7 Subparagraph (g) [No change.]

* * *

3. § 86.1807 Vehicle Labeling.

* * *

3.2 §86.1807-07. January 18, 2001 July 13, 2005. [No change, except that the amendments to §86.1807-01, 70 FR 72917 (December 8, 2005), still apply.]

* * * *

- 4. §86.1808 Maintenance Instructions.
- 4.1 §86.1808-01. October 6, 2000 July 13, 2005. [No change.]
- 4.2 §86.1808-07. January 18, 2001 July 13, 2005. [No change.]

* * * *

D. §86.1810 General standards; increase in emissions; unsafe conditions; waivers

* * * *

3. §86.1810-09. February 26, 2007. [No change, except that the amendments to §86.1810-01 set forth in D.1 and D.2 shall apply.]

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E. California Exhaust Emission Standards.

* * * *

2. Emission Standards Phase-In Requirements for Manufacturers

* * * *

2.5 Fleet Average Greenhouse Gas Requirements for Passenger Cars, Light-Duty Trucks, and Medium-Duty Passenger Vehicles.

2.5.1 The fleet average greenhouse gas exhaust mass emission values from passenger cars, light-duty trucks, and medium-duty passenger vehicles that are produced and delivered for sale in California each model year by a large volume manufacturer shall not exceed:

FLEET AVERAGE GREENHOUSE GAS			
EXHAUST MASS EMISSION REQUIREMENTS FOR			
	PASSENGER CAR, LIGHT-DUTY TRUCK, AND MEDIUM-DUTY		
PAS	SSENGER VEHICLE WI		
	(4,000 mile Durability V		
Model Year	Fleet Average Greenhouse Gas Emissions		
		mile CO2-equivalent)	
	All PCs;	LDTs .	
	LDTs 0-3750 lbs. LVW	3751 lbs. LVW - 8500 lbs.	
		GVW; MDPVs	
2009	323	439	
2010	301	420	
2011	267	390	
2012	233	361	
2013	227	355	
2014	222	350	
2015	213	341	
2016+	205	332	

Each manufacturer shall demonstrate compliance with these values in accordance with Section E.2.5.2.

2.5.1.1 For each model year, a manufacturer must demonstrate compliance with the fleet average requirements in this section E.2.5.1 based on one of two options applicable throughout the model year, either:

Option 1: the total number of passenger cars, light-duty trucks, and medium-duty passenger vehicles that are certified to the California exhaust

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Date of Release: August 7, 2009; 45-Day Notice version

emission standards in section 1961.1, title 13, CCR, and are produced and delivered for sale in California; or

Option 2: the total number of passenger cars, light-duty trucks, and medium-duty passenger vehicles that are certified to the California exhaust emission standards in section 1961.1, title 13, CCR, and are produced and delivered for sale in that have adopted, with adequate lead time, provisions authorizing such states to enforce California's greenhouse gas emission standards for that model year pursuant to Section 177 of the federal Clean Air Act (42 U.S.C. § 7507).

- 2.5.1.1.1 For the 2009 and 2010 model years, a manufacturer that selects compliance Option 2 must notify the Executive Officer of that selection in writing within 30 days of the effective date of the amendments to this section 2.5.1.1. or must comply with Option 1.
- 2.5.1.1.2 For the 2011 and later model years, a manufacturer that selects compliance Option 2 must notify the Executive Officer of that selection in writing prior to the start of the applicable model year or must comply with Option 1.
- 2.5.1.1.3 When a manufacturer is demonstrating compliance using Option 2 for a given model year, the term "in California" as used in subsections E.2.5.2.3 and E.3.2 means California, the District of Columbia, and all states that have adopted California's greenhouse gas emission standards for that model year pursuant to Section 177 of the federal Clean Air Act (42 U.S.C. § 7507).
- 2.5.1.1.4 A manufacturer that selects compliance Option 2 must provide to the Executive Officer volumes of vehicles produced and delivered for sale separately for each individual state within the average.

2.5.2 Calculation of Fleet Average Greenhouse Gas Value.

2.5.2.1 Basic Calculation.

2.5.2.1.1 Each manufacturer shall calculate both a "city" grams per mile average CO2-equivalent value for each GHG vehicle test group and a "highway" grams per mile average CO2-equivalent value for each GHG vehicle test group, including AB 965 vehicles and vehicles certified in accordance with Section E.1.12 of these test procedures, using the formula. For manufacturers electing to use CAFE Program data to demonstrate compliance, 1) Model Type Group data may be used in lieu of GHG test group data; and 2) metrohighway grams per mile average CO2-equivalent values may be used in lieu of 'city' and 'highway' grams per mile average CO2-equivalent. Greenhouse Gas emissions used for the "city" CO2-equivalent value calculation shall be measured using the "FTP" test cycle (40 CFR, Part 86, Subpart B), as modified in Part II of these test procedures. Greenhouse Gas emissions used for the "highway" CO2-equivalent value calculation shall be based on emissions measured using the Highway Test Procedures.

CO2-Equivalent Value = CO2 + 296 x N2O + 23 x CH4 - A/C Direct Emissions Allowance - A/C Indirect Emissions Allowance

A manufacturer may use N2O = 0.006 grams per mile in lieu of measuring N2O exhaust emissions. A manufacturer that elects to use CAFE Program emissions data to

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demonstrate compliance with the greenhouse requirements may substitute the term 1.9 CO2-equivalent grams per mile for the terms "296 x N2O + 23 x CH4" in this equation.

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2.5.2.1.2 A/C Direct Emissions Allowance. A manufacturer may use the following A/C Direct Emission Allowances, upon approval of the Executive Officer, if that manufacturer demonstrates that the following requirements are met. Such demonstration shall include specifications of the components used and an engineering

evaluation that verifies the estimated lifetime emissions from the components and the system. A manufacturer shall also provide confirmation that the number of fittings and joints has been minimized and components have been optimized to minimize leakage. No A/C Direct Emissions Allowance is permitted if the following requirements are not met.

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(d) A manufacturer that elects to use CAFE Program emissions data to demonstrate compliance with the greenhouse requirements shall calculate the A/C Direct Emissions Allowance for each Vehicle Configuration by calculating the A/C Direct Emissions Allowance for each air conditioning system used in that Vehicle Configuration and calculating a sales-weighted average for that Vehicle Configuration.

2.5.2.1.3 A/C Indirect Emissions Allowance. A manufacturer may use the following A/C Indirect Emissions Allowances, upon approval of the Executive Officer, if the manufacturer demonstrates using data or an engineering evaluation that the air conditioning system meets the following requirements. A manufacturer may use the following A/C Indirect Emissions Allowances for other technologies, upon approval of the Executive Officer, if that manufacturer demonstrates that the air conditioning system achieves equal CO2-equivalent grams per mile emissions reductions.

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(d) A manufacturer that elects to use CAFE Program emissions data to demonstrate compliance with the greenhouse requirements shall calculate the A/C Indirect Emissions Allowance for each Vehicle Configuration by calculating the A/C Indirect Emissions Allowance for each air conditioning system used in that Vehicle Configuration and calculating a sales-weighted average for that Vehicle Configuration.

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3. Calculation of Credits/Debits

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3.2 Calculation of Greenhouse Gas Credits/Debits.

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3.2.3 Procedure for Offsetting Greenhouse Gas Debits.

3.2.3.1. A manufacturer shall equalize Greenhouse Gas emission debits by earning g/mi Greenhouse Gas emission credits in an amount equal to the g/mi Greenhouse Gas debits, or by submitting a commensurate amount of g/mi Greenhouse Gas credits to the Executive Officer that were earned previously or acquired from another manufacturer. A manufacturer shall equalize Greenhouse Gas debits for PCs, LDTs, and MDPVs within five model years after they are earned. If emission debits are not equalized within the specified time period, the manufacturer shall be subject to the Health and Safety Code section 43211 civil penalty applicable to a manufacturer which sells a new motor vehicle that does not meet the applicable emission standards adopted by the state board. The cause of action shall be deemed to accrue when the emission debits are not equalized by the end of the specified time period. A manufacturer demonstrating compliance under Option 2 in section E.2.5.1.1, must calculate the emission debits that are subject to a civil penalty under Health and Safety Code section 43211 separately for California, the District of Columbia, and for each individual state that is included in the fleet average greenhouse gas requirements in subsection E.2.5.1.1. The manufacturer must calculate these emission debits separately for California, the District of Columbia, and each individual state using the formula in subsections E. 3.2.1.2 and E.3.2.2, except that the "Total No. of Vehicles Produced and Delivered for Sale in California, Including ZEVs and HEVs" shall be calculated separately for the District of Columbia and each individual state.

For the purposes of Health and Safety Code section 43211, the number of passenger cars and LDT1s not meeting the state board's emission standards shall be determined by dividing the total amount of g/mi Greenhouse Gas emission debits for the model year calculated for California by the g/mi Greenhouse Gas fleet average requirement for PCs and LDTs 0-3750 lbs. LVW applicable for the model year in which the debits were first incurred, and the number of LDT2s and MDPVs not meeting the state board's emission standards shall be determined by dividing the total amount of g/mi Greenhouse Gas emission debits for the model year calculated for California by the g/mi Greenhouse Gas fleet average requirement for LDTs 3751 lbs. LVW – 8500 lbs. GVW and MDPVs applicable for the model year in which the debits were first occurred.

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F. Requirements and Procedures for Durability Demonstration

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- 4. §86.1823 Durability demonstration procedures for exhaust emissions.
- §86.1823-01 October 6, 2000 February 26, 2007. Amend as follows: Add the following sentences to the first paragraph: Beginning with 2010 model-year vehicles or engines, at the time of certification manufacturers shall state, based on good engineering judgment and available information, that the emission control devices on their vehicles or engines are durable and are designed and will be manufactured to operate properly and in compliance with all applicable requirements for the full useful life (or allowable maintenance interval) of the vehicles or engines. Also, vehicles and engines tested for certification shall be, in all material respects, substantially the same as production vehicles and engines. If it is determined pursuant to title 13 CCR, Division 3, Chapter 2, Article 5, sections 2166 through 2174 that any emission control component or device experiences a systemic failure because valid failures for that component or device meet or exceed four percent or 50 vehicles (whichever is greater) in a California-certified engine family or test group, it constitutes a violation of the foregoing test procedures and the Executive Officer of the Air Resources Board may require that the vehicles or engines be recalled or subjected to corrective action as set forth in title 13 CCR, Division 3, Chapter 2, Article 5, sections 2166 through 2174. Certification applications may not be denied based on the foregoing information provided that the manufacturer commits to correct the violation.
- 4.2 §86.1823-08 January 17, 2006. [No change, except that the amendments to §86.1823-01 set forth in F.4.1 shall apply.]
- 4.23 SFTP. These procedures are not applicable to vehicles certified to the SFTP standards set forth in Section E.1.2.2.
- 4.34 **HEVs.** A manufacturer shall consider expected customer usage as well as emissions deterioration when developing its durability demonstration for HEVs.

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- 7. §86.1826 Assigned Deterioration Factors for Small Volume Manufacturers and Small Volume Test Groups.
 - 7.1 §86.1826-01. October 6, 2000 January 17, 2006. [No change.]
- G. Procedures for Demonstration of Compliance with Emission Standards
 1. §86.1827 Test Group Determination.
 - 1.1 §86.1827-01. October 6, 2000February 26, 2007. [No change.]
 - 2. § 86.1828 Emission data vehicle selection

- 2.1 §86.1828-01. [No change.]
- 2.2 §86.1828-10. February 26, 2007. [No change.]

2.23 50°F Requirements.

- $2.\underline{-23}.1$ Vehicle Selection. A manufacturer shall select at least three emission data and/or engineering development vehicles each year from PC or LDT test groups and at least three emission data and/or engineering development vehicles from MDV test groups.
- 2.23.2 The same test group shall not be selected in the succeeding two years unless the manufacturer produces fewer than three test groups. If the manufacturer produces more than three TLEV, LEV, ULEV or SULEV test groups per model year, the Executive Officer may request 50oF testing of specific test groups. If the manufacturer provides a list of the TLEV, LEV, ULEV and SULEV test groups that it will certify for a model year and provides a description of the technologies used on each test group (including the information in Section G.2.3.1.2(1)), the Executive Officer shall select the test groups subject to 50oF testing within a 30 day period after receiving such a list and description. The Executive Officer may revise the test groups selected after the 30 day period if the information provided by the manufacturer does not accurately reflect the test groups actually certified by the manufacturer.

2.34 Greenhouse Gas Vehicle Test Group.

- 2.34.1 Within each test group, a manufacturer shall group vehicles into Greenhouse Gas Vehicle Test Groups based on the following criteria being identical.
 - (a) Vehicle make and model;
 - (b) Transmission class and driveline (e.g., 2-wheel-drive, 4-wheeldrive);
 - (c) Aspiration method (e.g., naturally aspirated, turbocharged);
 - (d) Camshaft configuration;
 - (e) Valvetrain configuration; and
 - (f) Inertia weight class.
- 2.34.2 Greenhouse Gas Emission Test Vehicle Selection. Within each test group, the vehicle configuration shall be selected from the greenhouse gas vehicle test group that is expected to be "worst-case" for greenhouse gas emissions, as calculated in Section E.2.5.2.1, subject to approval by the Executive Officer. A manufacturer may select additional vehicle configurations from greenhouse gas vehicle test groups with lower greenhouse emissions values than the "worst-case" configuration.
- 3. §86.1829 Durability data and emission data testing requirements; waivers.
- 3.1 §86.1829-01. December 8, 2005 February 26, 2007. Amend as follows:

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3.2 50°F Requirements.

A manufacturer shall demonstrate compliance with the 50°F requirement each year by testing at least three PC or LDT and three MDV emission data and/or engineering development vehicles (with at least 4000 miles) as determined under the provisions of Section G.2.23 of these test procedures. Only TLEVs, LEVs, ULEVs and SULEVs are to be considered for testing at 50°F. It is not necessary to apply deterioration factors (DFs) to the 50°F test results to comply with this requirement.

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3.4 Greenhouse Gas Testing Requirements.

A manufacturer shall demonstrate compliance with the greenhouse requirements each year by testing one vehicle per each test group that represents the vehicle configuration that is expected to be "worst-case" for greenhouse gas emissions, as calculated in Section E.2.5.2.1, subject to approval by the Executive Officer. A manufacturer may test additional vehicles within the test group that represent vehicle configuration with lower greenhouse gas emissions values than the "worst-case" configuration. All vehicles shall be tested using both the FTP and Highway Test Procedures as modified in Part II of these test procedures. A manufacturer may use emissions data from tests it conducts as part of the Corporate Average Fuel Economy Program (CAFE), in accordance with 40 CFR Part 600 – Fuel Economy of Motor Vehicles, to demonstrate compliance with the greenhouse requirements, once those data have been judged acceptable by the U.S. Environmental Protection Agency. A manufacturer that elects to use CAFE Program emissions data to demonstrate compliance with the greenhouse requirements may use, as appropriate, all of the data that is used by the U.S. Environmental Protection Agency to determine a manufacturer's corporate average fuel economy for the applicable model year, and may forego testing of the "worst-case" configuration.

- 4. §86.1830-01 Acceptance of Vehicles for Testing. January 17, 2006. [No change.]
- 5. §86.1831-01 Mileage accumulation requirements for test vehicles. <u>January 17</u>, 2006. [No change.]

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8. §86.1834 Allowable maintenance.

8.1 §86.1834-01. October 6, 2000July 13, 2005. [No change except that the first allowable maintenance interval under subparagraphs (b)(3)(v) and (b)(4)(ii) shall be at the full useful life of the vehicle.]

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9. **§86.1835-01 Confirmatory certification testing.** July 12, 2001 April 13, 2001. [No change.]

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- 12. §86.1838 Small volume manufacturers certification procedures. <u>January 17</u>, 2006.
 - 12.1 §86.1838-01. December 6, 2002. [No change, except that the reference to 15,000 units shall mean 4,500 units in California and the reference to 14,999 units shall mean 4,499 units in California.]
 - 13. §86.1839-01 Carryover of certification data. January 17, 2006. [No change.]
 - 13.1 Greenhouse Gas Requirements.

The provisions of Section E.13 shall apply to greenhouse gas certification data only if the following conditions are met.

- (a) To carry over greenhouse gas certification data for a greenhouse gas vehicle group, a manufacturer must demonstrate to the Executive Officer, using good engineering judgement, that design changes to the vehicle from the previous model year do not increase greenhouse gas emissions or
- (b) To carry over greenhouse gas certification data for a "worst-case" vehicle configuration, a manufacturer must demonstrate to the Executive Officer, using good engineering judgement, that the previous model-year "worst-case" vehicle configuration still represents the "worst-case" vehicle configuration for the current model-year.
- 14. §86.1840 Special test procedures.
- 14.1 §86.1840-01 October 6, 2000 August 30, 2006. [No change.]
- H. Certification, Information and Reporting Requirements.
- 1. §86.1841 Compliance with emission standards for the purpose of certification 1.1 §86.1841-01. July 12, 2001 January 17, 2006.

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3. §86.1843 General information requirements

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3.3 Credit Reporting.

In order to verify the status of a manufacturer's compliance with the fleet average, <u>and</u> phase-in requirements in <u>Sections E.2.1 through E.2.4</u>, or <u>the</u> greenhouse gas requirements in <u>Section E.2.5</u> for a given model year, and in order to confirm the accrual of credits or debits, each manufacturer shall submit an annual report to the Executive Officer which sets forth the production data used to establish compliance, by not later than <u>March 1 or</u> May 1 <u>respectively</u>, of the calendar year following the close of the model year.

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4. §86.1844 Information Requirements: Application for Certification and Submittal of Information Upon Request.

- 4.1 §86.1844-01. October 6, 2000 February 26, 2007. Amend as follows:
- 4.1.1 All references to "test group" shall mean "test group and greenhouse gas vehicle test group."
 - 4.1.2 Modify §86.1844-01(d) as follows:
 - (a) Delete §86.1844-01(d)(9).
 - (b) Add the following requirement: A description of each greenhouse gas test vehicle including the criteria listed in Section G.2.34 and any additional information used by a manufacturer to demonstrate a "worst-case" vehicle configuration used to comply with the requirements of Section G.2.34.
 - 4.1.3 Add the following requirements to §86.1844-01(e):
 - (a) The information required in sections 2037, 2038 and 2039, title 13, CCR.
 - (b) The NMOG/NMHC and/or formaldehyde to NMHC ratios established according to Section I.1.4 of these test procedures

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4.5 Greenhouse Gas Reporting Requirements.

(a) For the purpose of demonstrating compliance with greenhouse gas requirements, the manufacturer shall provide by May 1 of the calendar year following the close of the model year:

(i) a comprehensive list of all emission test results, including the test vehicle description and identification number, CO2, CH4, and N2O emission data, the data and/or justifications used to determine the "worst case" greenhouse gas test vehicle configuration, as required by G.2.3.2, for each greenhouse gas vehicle test group. A manufacturer shall not submit any emission test results from vehicles tested, or calculated results, as part of the Corporate Average Fuel Economy Program, unless those results have been judged acceptable by the U.S. Environmental Protection Agency, in accordance with §600.007-08. A manufacturer that submits data from the Corporate Average Fuel Economy Program must clearly indicate whether the data is derived from vehicle testing or whether it is calculated. A manufacturer that elects to use CAFE Program emissions data to demonstrate compliance with the greenhouse requirements must use all of the data that is used by the U.S. Environmental Protection Agency to determine a manufacturer's corporate average fuel economy for the applicable model year, and may forego testing of the "worst-case" configuration;

(ii) a description of each air conditioning system and all data used to calculate the A/C Direct Emissions Allowance in subsection E.2.5.2.1.2 and the A/C Indirect Emissions Allowance in subsection E.2.5.2.1.3;

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- (iii) for vehicles certifying using the optional alternative compliance mechanisms in subsection E.2.5.2.2.1, all data required therein;
- (iv) for manufacturers demonstrating compliance under section E.2.5.1.1, Option 1, final California vehicle sales volumes for each greenhouse gas vehicle test group; and
- (v) for manufacturers demonstrating compliance under section E.2.5.1.1, Option 2, final combined and individual state sales volumes for each Model type group for California, the District of Columbia, and all states that have adopted California's greenhouse gas emission standards for that model year pursuant to section 177 of the federal Clean Air Act (42 U.S.C. § 7507).
- (b) All data submitted in accordance with this section H.4.5, must be submitted electronically and organized in a format specified by the Executive Officer to clearly demonstrate compliance with the fleet average greenhouse gas exhaust emission requirements in section E.2.5.

I. In-Use Compliance Requirements and Procedures

1. §86.1845 Manufacturer in-use verification testing requirements.

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1.2 §86.1845-04. December 8, 2005 December 28, 2006. Amend as follows:

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- 2. §86.1846 Manufacturer in-use confirmatory testing requirements.
- 2.1 §86.1846-01 July 12, 2001 December 28, 2006. [No Change.]

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J. Procedural Requirements

- 1. §86.1848-01 Certification. October 6, 2000. [No change.]
- 2. §86.1848-10 Certification. February 26, 2007. [No change.]
- 23. §86.1849-01 Right of entry. [No change.]
- 34. §86.1850-01 Denial, Suspension or Revocation of Certificate of Conformity. [No change.]
- 45. §86.1851 Application of good engineering judgment to manufacturers' decisions. [No change.]
- 56. §86.1852 Waivers for good in-use emission performance. [No change.]
- 67. §86.1853 Certification hearings. [No change.]
- 78. §§86.1854 86.1859. [Reserved]

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- §86.1860-04 How to comply with the Tier 2 and interim Tier 2 fleet average NOx standards. [n/a]
- 910. §86.1861-04 How do the Tier 2 and interim Tier 2 NOx averaging, banking and trading programs work? [n/a]
- 101. §86.1862-04 Maintenance of records and submittal of information relevant to compliance with fleet average NOx standards. [n/a]
- 142. §86.1863-07 Optional Chassis Certification for Diesel Vehicles. January 18, 2001 June 17, 2003. [No change]

PART II: CALIFORNIA EXHAUST AND PARTICULATE EMISSION TEST PROCEDURES FOR PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

This part describes the equipment required and the procedures necessary to perform gaseous and particulate exhaust emission tests (40 CFR Part 86, Subpart B); cold temperature test procedures (40 CFR Part 86, Subpart C); the California 50oF test procedure; the development of reactivity adjustment factors; and the supplemental federal test procedure (40 CFR Part 86, Subpart B) on passenger cars, light-duty trucks and medium-duty vehicles.

A. 40 CFR Part 86, Subpart B - Emission Regulations for 1977 and Later Model Year New Light-Duty Vehicles and New Light-Duty Trucks; Test Procedures.

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100.4 Calibration methods and frequency.

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86.121-90 Hydrocarbon analyzer calibration. June 30, 1995July 13, 2005.

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100.5 Test Procedures and Data Requirements.

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100.5.3 California Vehicle Preconditioning Requirements.

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86.144-94 Calculations; exhaust emissions. September 5, 1997 July 13, 2005.

100.5.4 Calculations; exhaust emissions.

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86.158-00	Supplemental Federal Test Procedures; overview. October 22, 1996July 13, 2005.
86.158-08	Supplemental Federal Test Procedures; overview. December 27, 2006.
86.159-00	Exhaust emission test procedures for US06 emissions. December 8, 2005.
86.159-08	Exhaust emission test procedures for US06 emissions. December 27, 2006.
86.160-00	Exhaust emission test procedure for SC03 emissions. December 8, 2005.
86.161-00	Air conditioning environmental test facility ambient requirements. October 22,
	1996 July 13, 2005.
86.162-00	Approval of alternative air conditioning test simulations and descriptions of AC1
	and AC2. October 22, 1996.
86.162-03	Approval of alternative air conditioning test simulations. October 22, 1996.
86.163-00	Spot check correlation procedures for vehicles tested using a simulation of the
	environmental test cell for air conditioning emission testing. October 22, 1996.
86.164-00	Supplemental federal test procedure calculations. October 22, 1996 July 13, 2005.
86.164-08	Supplemental federal test procedure calculations. December 27, 2006.

B. Subpart C - Emission Regulations for 1994 and Later Model Year Gasoline-Fueled New Light-Duty Vehicles and New Light-Duty Trucks; Cold Temperature Test Procedures

86.201-94	General applicability. July 17, 1992.
86.201-11	General applicability. December 27, 2006.

200.1 California applicability.

Amend subparagraph 86.201-94(a) as follows: This subpart describes procedures for determining the cold temperature carbon monoxide (CO) emissions from 2000 and later model year new passenger cars, light-duty trucks, and medium-duty vehicles (excluding natural gas, diesel-fueled, and zero-emission vehicles).

86.202-94	Definitions. July 17, 1992.
86.203-94	Abbreviations. July 17, 1992.
86.204-94	Section number construction. July 17, 1992.
86.205-94	Introduction; structure of subpart. July 17, 1992.
86.205-11	Introduction; structure of subpart. December 27, 2006.
86.206-94	Equipment required; overview. July 17, 1992.
86.206-11	Equipment required; overview. December 27, 2006.

200.2 California Equipment Required; Overview.

Amend §§86.206-94 and <u>86.206-11</u>, as follows:

This subpart contains procedures for exhaust emission tests on passenger cars, light-duty trucks, and medium-duty vehicles (excluding natural gas, diesel-fueled, and zero-emission vehicles.) Equipment required and specifications are as follows:

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- (a)(1) **Exhaust emission tests**. Exhaust from vehicles (excluding natural gas, diesel-fueled, and zero-emission vehicles) is tested for gaseous emissions using the Constant Volume Sampler (CVS) concept (§86.209). Equipment necessary and specifications appear in 40 CFR Part 86, §§86.208 through 86.214.
- (a)(2) Fuel, analytical gas, and driving schedule specifications. Fuel specifications for exhaust emission testing for gasoline-fueled vehicles are specified in 40 CFR Part 86, §86.213. As an option, a manufacturer may utilize the fuel specified in §86.213 with the sulfur content limited to 30-40 ppm by weight. Fuel specifications for exhaust emission testing for alcohol-fueled vehicles and liquefied petroleum gas vehicles are specified in Part II, Section A.100.3 of these test procedures. Analytical gases are specified in 40 CFR Part 86, §86.214. The EPA Urban Dynamometer Driving Schedule (UDDS) for use in emission tests is specified in 40 CFR Part 86, §86.215 and appendix I to this part.

86.208-94	Dynamometer. July 17, 1992.
86.209-94	Exhaust gas sampling system; gasoline-fueled vehicles. July 17, 1992.
86.211-94	Exhaust gas analytical system. July 17, 1992 December 27, 2006.
86.213-04	Fuel specifications. February 10, 2000.
86.213-11	Fuel specifications. December 27, 2006.
86.214-94	Analytical gases. July 17, 1992.
86.215-94	EPA urban dynamometer driving schedule. July 17, 1992.
86.216-94	Calibrations, frequency and overview. July 17, 1992.
86.218-94	Dynamometer calibration. July 17, 1992.
86.219-94	CVS calibration. July 17, 1992.
86.221-94	Hydrocarbon analyzer calibration. July 17, 1992.
86.222-94	Carbon monoxide analyzer calibration. July 17, 1992.
86.223-94	Oxides of nitrogen analyzer calibration. July 17, 1992.
86.224-94	Carbon dioxide analyzer calibration. July 17, 1992.
86.226-94	Calibration of other equipment. July 17, 1992.
86.227-94	Test procedures; overview. July 17, 1992.
86.228-94	Transmissions. July 17, 1992.
86.229-94	Road load force, test weight, and inertia weight class determination. July 17,1992.
86.230-94	Test Sequence; general requirements. July 17, 1992.
86.230-11	Test Sequence; general requirements. December 27, 2006.
86.231-94	Vehicle Preparation. July 17, 1992.
86.232-94	Vehicle Preconditioning. July 17, 1992.
86.235-94	Dynamometer procedure. July 17, 1992.
86.236-94	Engine starting and restarting. July 17, 1992.
86.237-94	Dynamometer test run, gaseous emissions. July 17, 1992.
86.237-08	Dynamometer test run, gaseous emissions. December 27, 2006.
86.240-94	Exhaust sample analysis. July 17, 1992.
86.242-94	Records required. July 17, 1992.
86.244-94	Calculations; exhaust emissions. July 17, 1992 February 21, 2007.
86.246-94	Intermediate temperature testing. July 17, 1992.

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